One oddity of digital 'Copyright' is that the resolution of Napster v RIAA appears to have legislated a very odd thing. A file that is potentially derivative once passed through a transform is ruled 'an infringing copy'. In effect, that is saying that 'HAL' is a copy of 'IBM'. You can get from one to the other by just incrementing along the alphabet. The weird part is that there is an infinate number of transformations... and thus every text can be considered an exact copy of every other text. It's even simple to express the transform between any two texts as a one-time pad encryption. My copyright predates the copyright for 'Star Wars Episode II'....

2)

The fear of the potential digital broadcasters is that a single perfect copy of any of their works would eliminate any revenue stream they might realize from the traditional broadcasting/rental markets. Betamax, VHS, audio cassette libraries... none of these caused the subsequent demise of the content producers. The fallacy is in thinking that it is possible to prevent the single perfect copy from 'escaping'. Legislated hardware requirements might restrict the casual occurance -but so far no legislation has been sufficient to prevent dedicated hardware from being developed in unrestricted countries. Once a single 'uncopy protected' version is available, the hardware blocks aren't going to be able to recognize/restrict it. That in turn makes the hardware blocks limitation on hardware for no real benefit.

3)

The only market where the slightest hint of a problem has been shown is the audio CD market. In a recession, where the RIAA has had many groups mutter 'boycott' against them, with sales price clearly exceeding production cost, and with some RIAA endorsed 'copy protection' causing property loss in law-abiding consumers equipment, they witnessed a decline in CD sales. The MPAA, however, has dropped pricing 50% on DVDs in the same timeline... and are making far more money off DVDs than they did off VHS tapes in the first years of VHS.

4)

The goal of technology is to make our lives simpler and/or more fullfilled. There are a large number of technologically feasible widgets being inhibited for fear of non-compliance with the eventual strictures. I'll describe one set. When I look behind my entertainment center, I see a tangled mass of cables of varying types. Adopting the simple motto 'Violating copy protection is a crime, but anything with a substantial non-infringing use is fine' would lead to a complete elimination of this clutter. A firewire equipped TV, a separate firewire equipped HDTV tuner, DVD player, VCR, PVR, audio system....

It is _not_ because of the cost of the components that none of these devices have been adopted for a fully firewire based entertainment system. It's less than \$29 for an end user to add firewire to a computer card - half of that price is for it being on a separate card, and economies of scale in the consumer electronic arena would drive the

price to well below the cost of having standard RCA jacks (on digital equipment).

5)

Why does piracy even exist? Most people don't condone theft. But, when it comes to information, it seems that people feel somewhat justified in the personal-use infractions that they perform. Why? Because the value is not perceived to be anywhere near the 'Retail Price' of the product. When you know for a fact that the physical requirements of mastering a CD costs less than \$0.50 (because you've made one yourself for less). And you know that the retail price is \$20.00. And that you are buying pieces you really have no interest in (the other 14 songs on the disk)... It becomes less appealing of a product. It's almost like haggling. (Not that I agree with it, just pointing out the viewpoint.)

On the other hand, the DVD industry has been actively working the market. There's a pack of value-added features in most every DVD, and the prices have been coming steadily down. Instead of holding to the \$80 (or higher!) price the original VHS market had, or the \$30+ market DVDs started in, now there's plenty of current material to be had for \$15. The combination of savvy marketing and value added tough-to-pirate material (that didn't require any special legislation mind!) means the industry is doing fine.

6)

It's all backwards anyway. If anyone should be protected by enforced regulations or legislation, it should be the SMALL copyright holder. If Disney found out the John Doe had pirated material, John Doe would meet a barrage of lawyers. They don't need the publically funded FCC's help to find or punish violators.

7)

Tools vs. Crimes. A pry-bar is a very useful tool. It has substantial non-infringing uses. It has substantial criminal uses as well. Locking all the pry-bars in a safe does NOT prevent the crimes pry-bars are used for. It just makes home repairs more difficult, more costly, and more irritating as other, less useful tools must be applied. A lobby _for_ the legalization of pry-bars is not a lobby of criminals looking to make crime easier, it's a lobby of home owners asking for a shred of sanity.

8)

Data is data. For this to _really_ work, it would need to be on anything that could access data. CD players do things differently from VCRs which do things differently from DVD players... and they all have to work together perfectly for this to work. If you look carefully at all the DVD players, you find that there's huge gaping holes in the DVD encrypt-everything region-encode everything plan. And that's _one_ piece of the data industry. The plan that appears to me to be described above would put drastic restrictions and increased on a slew of devices available from, say, National Instruments, while slowing down the true pirates not one whit.

So what I advocate is:

- 1) Have a 'copyright broadcast' flag. That's fine. Mandatory contact information for the copyright holder might go right there very nicely too. Make lying here illegal. Include a hash of the full copyright broadcast, to allow for integrity verification.
- 2) Do _not_ place any requirements on any hardware with a substantial non-infringing use. No, don't let Hollywood determine what 'substantial non-infringing use' is. A DVD mastering box that makes a color copy of the label and affixes it after making a copy with the 'Copy Protect Bit' removed -> bad. A 'DVD recorder' that works much like a current VCR while retaining the full copyright information (including the Copy Protect Bit) -> fine. Plenty of non-infringing uses. Just as two for-instances: time shifting, and duplication of things for which the OWNER of the box holds copyright.
- 3) Prosecute people who willfully exceed the uses referred to/accepted as 'Fair Use'. Spell out the historical precedents without altering them to suit the MPAA/RIAA. That is, no rebroadcasting, no selling, and other things that just aren't happening anyway.

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